

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for forming, by epitaxy, a heteroatomic single-crystal semiconductor layer on a single-crystal semiconductor wafer, the crystal lattices of the layer and of the wafer being different, the method comprising:

first forming in the wafer surface, before epitaxy, at least one ring of discontinuities around a useful region of the wafer by forming at least one rough area in the wafer surface around the useful region, wherein said rough area includes a plurality of surface irregularities distributed over the wafer surface within said ring of discontinuities; and

subsequently forming, by epitaxy, the heteroatomic single-crystal semiconductor layer directly on the wafer surface.

2. (Original) The method of claim 1, wherein the layer is a silicon-germanium layer and the wafer is a silicon trench.

3. (Original) The method of claim 1, wherein an insulating trench is formed, after the epitaxy, at the ring location, said trench surrounding an active area intended to contain at least one elementary component.

4. (Original) The method of claim 1, wherein said rings have a square or rectangular shape and their limits are arranged according to paths of subsequent cutting of the wafer in electronic chips.

5. (Original) The method of claim 1, wherein the roughness of said rough area exhibits a mean square deviation ranging between 10 and 30 nm.

6. (Original) The method of claim 1, wherein an additional single-crystal semiconductor layer is formed by epitaxy on the heteroatomic layer, the natural crystal lattice of the material forming the additional layer being different from that of the heteroatomic layer, whereby the additional layer is strained according to the lattice of the heteroatomic layer.

7. (Original) The method of claim 6, wherein the additional layer is a silicon layer.

8-9. (Canceled).